## REMARKS

The indication that claims 6 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, is acknowledged. By the present amendment, claims 6 and 8 have been written in independent form incorporating the features of the parent claims therein, which parent claims have been amended in the manner which is considered to overcome the rejection under 35 USC 112. Additionally, applicants note that since claim 8 is a multiple dependent claim, dependent upon claim 3 or claim 5, claim 8 has been written in independent form incorporating the features of parent claim 3 therein, and a new independent claim 9, corresponding to claim 8 written in independent form incorporating the features of parent claim 5 therein, has also been presented. Thus, claims 6, 8 and 9 represent the objected to claims, and should now be in condition for allowance.

By the present amendment, claims 1 and 2 have been canceled without prejudice or disclaimer of the subject matter thereof with the remaining claims being amended to overcome the rejection of claims 1 - 8 under 35 USC 112, second paragraph, and the objection to claim 4. Additionally, new dependent claims 10 - 34 reciting further features of the present invention have been presented, as will be discussed below. Applicants submit that all claims present in this application should be considered to be in compliance with 35 USC 112.

As to the rejection of claims 1 - 5 and 7 under 35 USC 102(b) as being anticipated by Yamashita et al (US Patent No. 6,240,309), this rejection is traversed insofar as it is applicable to the present claims and reconsideration and withdrawal of the rejection are respectfully requested.

As to the requirements to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

Applicants note that each of independent claims 3 and 5 recite the feature of "a judgment unit" which is included in the processing unit 110, as shown in Fig. 1, and which operates in the manner illustrated in Figs. 5 and 6 of the drawings of this application, for example. More particularly, claim 3 recites the features of a judgment unit which judges normal health or a kind of disease of the subject through comparison between the extracted characteristic of the hemoglobin variation pattern and respective reference templates of the normal health and the variety of diseases stored in the memory unit, it being noted that the signal processing unit is provided with a memory unit 111, as shown in Fig. 1, for example, which stores characteristics of hemoglobin variation patterns of respective normal health and a variety of diseases as reference templates. Claim 5 recites the feature of a judgment unit which compares the characteristics of the hemoglobin variation pattern at the

detection portion of the subject extracted by the characteristic extraction unit and the reference templates representing the characteristics of the hemoglobin variation patterns at the same detection portions of the respective normal health and variety of diseases stored in the memory unit and judges whether the subject is in normal health or in any one of the diseases. Applicants submit that the aforementioned recited features of independent claims 3 and 5 are not disclosed by Yamashita et al in the sense of 35 USC 102.

In applying Yamashita et al to the claimed invention, the Examiner contends that "Figure 34 of Yamashita et al '309 further discloses that the signal processing unit integrates values of total hemoglobin concentrations at arbitrary time intervals, is capable of determining rates of changes in total hemoglobin concentrations measured and also contains a judgment unit which the characteristics of the hemoglobin variation pattern at a detection point of the subject with reference values stored in memory (col. 35, lines 41-57)." (emphasis added). The Examiner also indicates that "Lines 24-29 of col. 41 specifically indicate that the apparatus of Yamashita et al '309 is capable of being used as a diagnostic and warning device for determining the focus of epilepsy and functional brain activity in patients with cerebral diseases." (emphasis added). Applicants submit that the Examiner has mischaracterized the disclosure of Yamashita et al in relation to the claimed invention.

Applicants note that the portions of Yamashita et al referred to by the Examiner relate to fifth and sixth embodiments of Yamashita et al, which are directed to input and control devices by the living body, wherein the optical measurement instrument for the living body is designed to control various external equipment, such as a computer, word processor, game machine, as described in column 29, line 66

to column 30, line 5. Moreover, as described in column 30, line 66 to column 31, line 10 of Yamashita et al, the invention of Yamashita et al can be applied to a driver's doze warning device, an environmental control device, a learning-level determining device, an indicator for indicating intention of a patient, childhood, animals, etc., an information transmission device, or a lie detector or the like. Thus, in accordance with the disclosure of Yamashita et al, a respective optical measurement instrument serving as an input and control device by the living body is a dedicated instrument designed to detect hemoglobin signals representing a specific brain activity for detecting the specific brain activity hemoglobin signals for determining appearance or onset of such specific brain activity, with reference to reference data stored in a memory. As shown in Fig. 34 of Yamashita et al, the hemoglobin concentration in the measurement region 1 is processed to determine characteristic parameters, which include the integrated values of respective or arbitrary hemoglobin concentration at arbitrary time intervals, as noted by the Examiner, and the determined characteristic parameters are compared with reference data stored in a memory so as to determine whether the characteristic parameter value falls within a predetermined arbitrary threshold range. If it is found to fall within the threshold range, an output signal is generated for driving an external equipment. Referring to column 4, lines 24 - 29 of Yamashita et al, which provides "it is also possible to apply the input device as a diagnostic and warning device for medical care. Namely, it can be applied to a diagnostic device for determining the focus of epilepsy of an epileptic patient, a functional brain activity detection device for a patient having a cerebral disease, a warning device for epileptic fit, etc." (emphasis added). Thus, in the described cases, a determination has previously been made that the patient is an epileptic, or that the patient suffers from a cerebral disease, and based upon such

determination, when the hemoglobin concentrations are within a threshold range, or the like, a determination of an onset epileptic encounter of an epileptic patient is made, or a determination of onset of a cerebral activity for a patient having a cerebral disease. Irrespective of the position set forth by the Examiner, the alleged judgment unit of Yamashita et al, which operates on a threshold range, provides no disclosure or teaching of judgment of "normal health or a kind of disease of the subject", as recited in independent claim 3 or "whether the subject is in normal health or in any one of the diseases" as recited in independent claim 5, based upon comparison of characteristics of the hemoglobin variation pattern and reference templates of respective normal health and the variety of diseases stored in the memory unit. In this regard, applicants submit that in addition to Yamashita et al failing to disclose a judgment unit operating in the manner recited in independent claims 3 and 5 and the dependent claims, Yamashita et al also fails to disclose a memory unit which stores characteristics of hemoglobin variation patterns of respective normal health and a variety of diseases as reference templates. Thus, applicants submit that independent claims 3 and 5 and the dependent claims recite features not disclosed by Yamashita et al, in the sense of 35 USC 102, and all claims should be considered allowable thereover.

With respect to the dependent claims, applicants note that the dependent claims recite further features of the present invention which, when considered in conjunction with the parent claims, further patentably distinguish thereover. Applicants note that newly added dependent claims 10 and 11 recite features as described at page 12, lines 9 - 12 of the specification; newly added claims 12 and 13 recite features described at page 13, lines 1 - 6 of the specification; newly added claims 14 and 15 recite the features described at page 13, lines 7 - 9 of the

specification; newly added claims 16 and 17 recite features described at page 13, lines 13 - 17 of the specification; newly added claims 18 and 19 recite features described at page 13, line 22 to page 14, line 1; newly added claims 20 and 21 recite features described at page 14, lines 1 - 4 of the specification; newly added claims 22 and 23 recite features described at page 15, lines 1 - 6 of the specification; newly added claims 24 and 25 recite features described at page 16, lines 1 to page 17, line 3; newly added claims 26 and 27 recite features described at page 18, lines 4 - 8 of the specification; newly added claims 28 and 29 recite features described at page 18, lines 13 and 14 of the specification; newly added claim 30 recite features described at page 18, lines 17 - 20 of the specification, newly added claims 31 and 32 recite features described at page 19, lines 20 - 25 of the specification, and newly added claims 33 and 34 recite features described at page 20, lines 10 - 13 of the specification. Thus, the newly added dependent claims recite features supported by the specification, and when considered in conjunction with the parent claims, further patentably distinguish over Yamashita et al and should be considered allowable thereover.

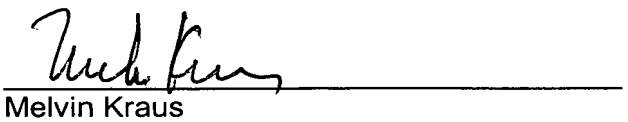
In view of the above amendments and remarks, applicants submit that all claims present in this application should be considered to be in compliance with 35 USC 112 and patentably distinguish over the cited art and should now be in condition for allowance. Accordingly, issuance of an action of favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli,

Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 983.44265X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



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